NOTES ON MESEMBRYANTHEMUM AND ALLIED GENERA

H. M. L. Bolus

Cheiridopsis albirosea L. Bol. sp. nov. (*Grandes—Denticulatae*).—Planta 1 visa, senectissima, ad 7 cm. alta, ca. 12 cm. diam.; partes herbaceae molliter pubescentes, brunneo virides; folia supra lanceolata, acuta vel subobtusa, lateraliter visa fere semicircularia vel oblonga superneque leviter dilatata, truncata, obscure denticulata, 2—3 cm. longa, basi laminae ad 1 cm. lata; pedunculi teretes, 1—1·6 cm. longi, 1·5—2 mm. diam., basi bracteati, bracteis obscure denticulatis, semicircularibus vel late obovatis; receptaculum globose obconicum, 7 mm. longum, ad 8 mm. diam.; sepala 5, exteriora minutissime apiculata, e parum supra basim gradatim angustata, 7—9 mm. longa, basi 4—6 mm. lata, interiora ample marginata, apud apicem minute subulata, 7—8 mm. longa, basi 4—5 mm. lata; petala ca. 6-seriata, interiora pauca, exteriora e bene infra medium inferne leviter angustata, saepius acuta, inferne alba, superne pulchre rosea, 1·1—3 cm. longa, 0·5—1·25 mm. lata; stamina ca. 6-seriata, alba, ad 7 mm. longa, intima parum supra basim papillata; ovarium supra circa marginem planum, medio lobato, lobis obtusis, ca. ad 0·75 mm. elevatis; stigmata ca. 12, gracilia pallida, 6 mm. longa.

Cape Province: Namaqualand; *P. van Heerde*. Fl. hort. van Heerde Sept. 1966. Bolus Herbarium 27829.

Cheiridopsis dilatata L. Bol. sp. nov. (*Grandes—Denticulatae*).—Planta 1 visa, crebre ramosa, ad 7 cm. alta, ca. 11 cm. diam.; partes herbaceae molliter pubescentes; folia inferiora lanceolata acuminata, ad 5 cm. longa cum vagina 1·5 cm. longa, lateraliter visa superne gradatim dilatata, latissima parum supra medium, ad 1·5 cm. diam., deinde ad apicem subtruncatum, obscure denticulatum, ad 7 mm. diam., angustata, immatura conspicue denticulata, folia superiora non dilatata, ad 4·1 cm. longa ad 6 mm. lata diametroque; pedunculi ad 2·5 cm. longi, apice 3 mm. diam., basi bracteata, bracteis obscure denticulatis; receptaculum globose obconicum, 4 mm. longum, apice 7 mm. diam.; sepala 5, rubre apiculata, apiculo ad 1 mm. longo, fere lanceolata, superne leviter compressa, 1·2—1·3 cm. longa, basi 4—7 mm. lata; petala

ca. 5-seriata, inferne leviter angustata, obtusa, albida vel interdum pallide aureo suffusa, ad 2·6 cm. longa, ad 1·5 mm. lata; filamenta ca. 5-seriata, alba, ad 5 mm. longa, parum supra basim papillata, antheris pollineque pallide luteis; ovarium supra circa marginem planum, lobis levissime elevatis; stigmata 13, pallide viridia, ad 6 mm. longa.

Cape Province: Namaqualand; "on the bit of road running from the Poffadder Rd. to Concordia." *P. van Heerde.* Fl. hort. van Heerde Sept. 1966. Bolus Herbarium 27828.

Drosanthemum pickhardii L. Bol. sp. nov. (*Aspericaulia—Speciosa*).—Rami plures culti visi, graciles, ad 15 cm. longi, ad 9 cm. diam., internodüs saepius 1—2 cm. longis, ad 2 mm. diam., ramulis 2—5 cm. longis; partes herbaceae inconspicue papillatae; folia ascendentia, supra visa plana subacuta, lateraliter visa prope apicem leviter angustata, obtusa, dorso rotundo, viridia, 1—1·5 cm. longa, ad 2·5 mm. lata, ad 3 mm. diam.; flores ad 4·2 cm. diam.; pedunculi 1—3 cm. longi; receptaculum obconicum vel fere subpiriforme, saepius ad 7 mm. longum diametroque; sepala 5, crassa obtusa, exteriora 2—3 mm. longa, basi 4—5 mm. lata, interiora 4—5 mm. longa, basi 3 mm., vel complanata ad 5 mm., lata; petala ca. 5-seriata, seriebus interioribus 3 acutis vel acuminatis, exterioribus e prope medium inferne angustatis pallidisque, oculum formantibus, obtusa, aurea vel rubre aurantiaca, ad 2·1 cm. longa, ad 2 mm. lata; staminodia atra obtusa, ad 3 mm. longa; stamina ca. 4-seriata, albida, ad 3 mm. longa, intima prope basim obscure papillata; glandulae approximatae; ovarium supra planum, lobis stellate patentibus, glandulas attingentibus, compressis; stigmata 5, anguste subulata, minute parceque intus papillata, ad 2 mm. longa cum cauda ca. 0·5 mm.; capsula brunnea, infra obconica, obtuse 5-angulata, ad 8 mm. longa, 9 mm., expansa, 1·3 cm. diam., supra fere ad 2 mm. elevata, suturis valde compressis.

Cape Province: in dit. Robertson; Montagu, Oct. 1932, *R. Pickhard.* N.B.G. 2610/32. Fl. Oct. 1933.

Ad **D. pulchrum** L. Bol. valde affine sed differt sepalis exterioribus brevioribus; petalis non luteo vittatis, inferne pallidis et oculum formantibus; stigmatibus anguste subulatis, intus parcissime papillatis, cauda multo breviore.

Note.—The type of **D. splendens** L. Bol. was also collected by *R. Pickhard* (N.B.G. 2609/32) at Montagu and constitutes a third species having the same type of sepals.

Drosanthemum hallii L. Bol. sp. nov. (*Aspericaulia—Speciosa*).—Rami plures feri visi, rigidi, fere erecti, ad 27 cm. longi, ad 5 mm. diam., internodiis 1—4·5 cm. longis; ramuli floriferi 1·5—4 cm. longi, 1 mm. diam.; folia saepe fere erecta, supra plana linearia acuta, dorso rotundo, lateraliter visa superne non angustata vel interdum prope apicem leviter recurva angustataque, papillis

inconspicue nitentibus, viridia, 1—2·6 cm. longa, ad 2·5 mm. lata, 1·5—2·5 mm. diam., vagina subnulla; flores 3·5—4 cm. diam.; pedunculi minute nitenteque papillati, 5—20 mm. longi; receptaculum globose obconicum, papillatum, 5 mm. longum, 6—7 mm. diam.; sepala exteriora e parum supra basim angustata, subacuta, 5—6 mm. longa, basi ad 4 mm. lata, interiora superne breviter subulata, subula patente, ad 5 mm. longa, basi 2·5—4 mm. lata; petala ca. 5-seriata, interiora paucissima, filamentosa, ad 8 mm. longa, exteriora e prope medium inferne angustata, acuta vel acuminata vel rarius obtusa, laete lutea, ad 1·8 cm. longa, 0·5—1·5 mm. lata; staminodia atra paucissima, ad 2 mm. longa; filamenta ca. 5-seriata, intima prope basim obscure papillata, cum antheris pollineque albis; glandulae sat inconspicuae, subdistantes; ovarii lobi compressi, sat distantes, ad 1 mm. elevati; stigmata 5, grosse papillata, ad 2 mm. longa cum cauda ad 0·75 mm. longa; capsula ad 9 mm. longa, 9 mm., expansa, 1·4 cm., diam., supra per 2 mm. elevata, suturis valde compressis, carinis inferne parallelis sed non contiguis, superne divergentibus, integris, brevissime aristatis.

Cape Province: in dit. Worcester; "on very stony slope 2 miles E. of Rawsonville, near Worcester," Oct. 1960, *H. Hall* 2119. N.B.G. 877/60.

Note.—A more luxuriantly grown form of this species was collected on "hills S. of Brandvlei", near Worcester by F. J. Stayner and flowered in Oct. 1962. Karoo Garden 780/62.

Leipoldtia compressa L. Bol. var. **lekkersingensis** L. Bol. var. nov.—Planta visa, 2·5 cm. longa, caule 3 mm. diam.; rami primarii ad 19 cm. longi, internodiis 1—3 cm. longis, cuticula brunnea vel rubre brunnea; ramuli ad 9 cm., ultimi floriferi (cum floribus 1—3-natis) 3—4 cm., longi, ad 6-foliati; folia ascendentia vel late patentia, supra visa oblonga obtusa, lateraliter visa obtusa vel apice rotundo, 1—1·8 cm. longa, 6 mm. lata, matura 4—9 mm. diam.; flores ad 4·2 cm. diam.; pedunculi sat robusti, 1·3—5 cm. longi, ad 1·25 mm. diam., saepissime infra medium bracteati, bracteis 5—10 mm. longis; receptaculum obconicum, 3 mm. longum, ad 7 mm. diam.; sepala 5, obtusa, 6—8 mm. longa, basi 2—4 mm. lata, interiora marginata; petala ca. 3-seriata, e parum supra medium inferne leviter angustata, obtusa, inferne alba, superne pallide rosea, ad 1·5 cm. longa, ad 1 mm., vel parum ultra, lata; staminodia ad stamina adpressa eaque leviter excedentia, albida; filamenta ca. 3-seriata, nivea vel pallidissime rosea, ad 9 mm. longa, intima parum supra basim papillata; ovarium minute tuberculatum, supra semiglobose ad 1·5 mm. elevatum, lobis obscuris; stigmata 10, gracilia, breviter caudata, 4 mm. longa; capsula senecta infra globose obconica, 5 mm. longa, 7 mm., expansa, 1·4 cm., diam., supra per 5 mm. elevata, apice 5 mm. diam., valvis expansis patentibus vel recurvis, apice vero erecto, carinis inferne parallelis, superne divergentibus, vix dimidium

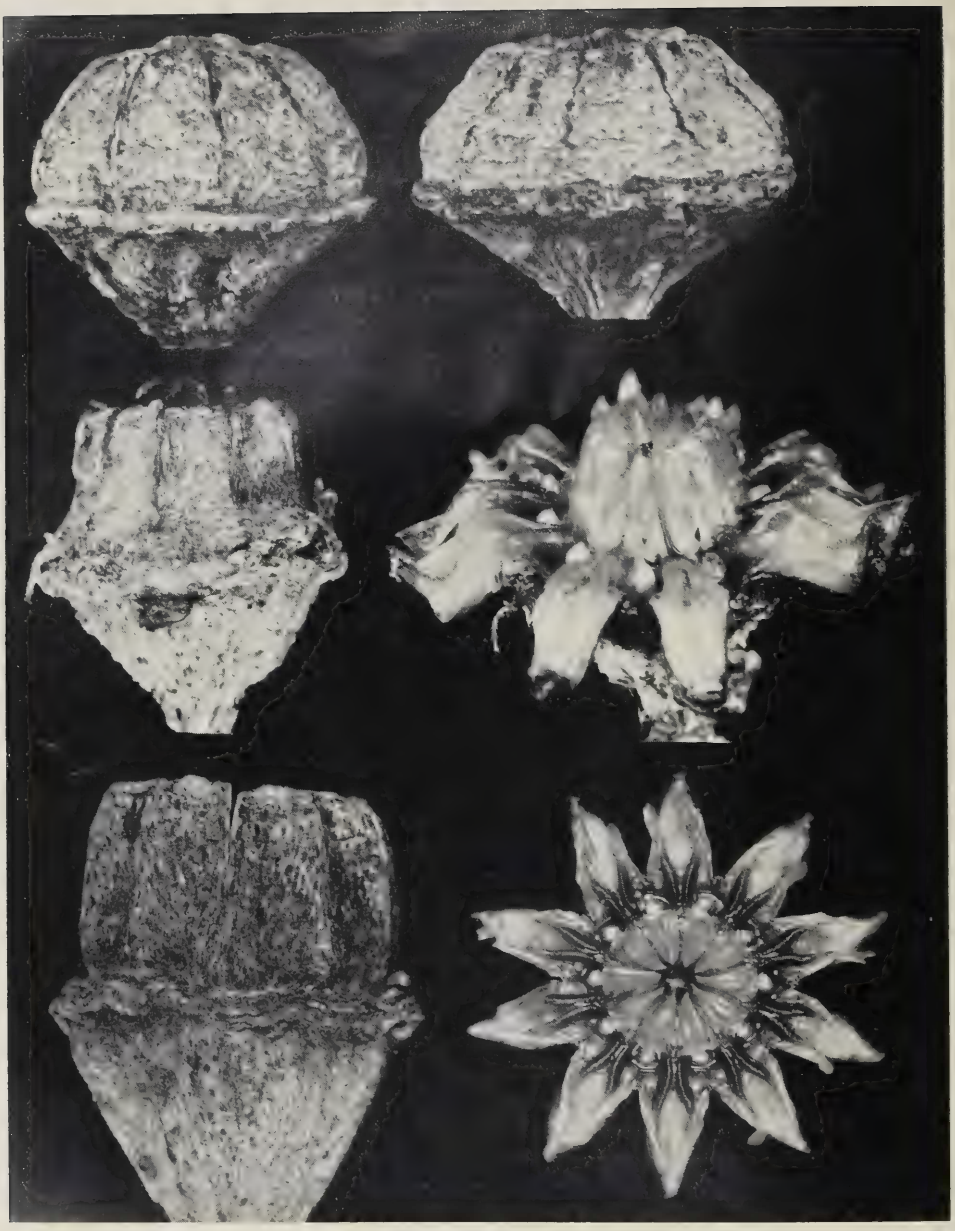

PLATE 1.
Capsules of three species of the genus *Leipoldtia*.

valvae attingentibus, alis apicem attingentibus, alis loculorum erectis, ad 1·75 mm. altis.

Cape Province: Namaqualand; "2 miles S.E. of Lekkersing," *R. C. Littlewood.* Karoo Garden 939/62. Fl. July 1964.

This species and especially its variety described above have the upper part of the capsule turret-like, the valves being upright, with their apex inflexed and giving a truncated top, a form not recorded in any other genus of the *Mesembrieae*. The cell-wings are also erect, the seeds being confined to the receptacle. This seemed to justify the creation of a new genus; but Dr. Ihlenfeldt, whom I consulted, has made a most interesting series of photographs, showing gradations from the more normal forms to the turret-form. A small selection of these is reproduced here.

We are greatly indebted to him for this service.

Note.—The type specimens of all new species described in this paper are in the Bolus Herbarium, University of Cape Town.

(*To be continued*)